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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/945,551	09/02/2001	Markus Baumann	GS 0443 A US	1933

7590 07/01/2003
Alfred J. Mangels
4729 Cornell Road
Cincinnati, OH 45241-2433

EXAMINER

STEFANON, JUSTIN

ART UNIT	PAPER NUMBER
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3682

DATE MAILED: 07/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/945,551

Applicant(s)

BAUMANN ET AL.

Examiner

Justin Stefanon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 7-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 7-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 April 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 07 April 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Drawings

2. The proposed drawing correction, filed on April 7, 2003 has been approved. The corrected or substitute drawings were received on April 7, 2003. These drawings are acceptable.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 7, 8, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pat. No. 4,944,715 to Ueda et al. in view of US Pat. No. 6,066,068 to Takemura et al. and further in view of US Pat No. 4,698,050 to Hattori et al.

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Ueda et al. disclose a plate-link chain 40 for a CVT with plate links 11 having pairs of rocker members 20 inserted into the links with rocker surfaces 38 supported against each other, the end faces of the rocker members in contact with conical disks 3 provided with a nitrided outer layer described in column 10, lines 45-50. However, Ueda fails to disclose the particulars of the nitrided outer layer. Takemura et al. teach the use of a carbonitrided outer layer in a CVT torque transmission element with a nitrogen content of 0.02%, which is at least about 0.01%, and which is further case hardened. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the nitrided layer of Ueda with the carbonitrided layer having N levels and case hardening of Takemura in order to inhibit frictional wear, as disclosed in column 3, lines 20-25. Ueda in view of Takemura fail to disclose the exact thickness of the nitrided layer. Hattori discloses that it is known in the art to provide a CVT belt with a nitrided outer layer having a thickness of about 50 microns. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the nitrided outer layer of Ueda with the thickness taught by Hattori, in order to reduce frictional wear, as disclosed in column 5, lines 5-25.

In reference to claim 19, the prior art shows the carbonitrided layer. The prior art discloses the basic product as cited in the claims. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. See MPEP § 2113.

5. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda in view of Takemura and Hattori as applied to claim 8 above, and further in view of US Pat. No 6,254,543 to Chiba et al.

Ueda, Takemura, and Hattori teach the claimed invention except for the exact depth of the case hardening. Chiba discloses that it is known in the art to provide a CVT transmission with a nitrided layer having a case depth of at least 0.5 mm. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the nitrided layer of Ueda with the case hardened depth of Chiba, in order to increase frictional wear resistance, as taught in column 6. lines 40-55.

6. Claims 2, 11-18, 20, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chiba et al in view of Takemura et al. and further in view of Hattori et al.

Chiba et al. discloses in column 1, lines 39-55, a thrust link belt for a CVT with conical disks having a belt strand and thrust links, i.e. V-shaped elements, carried by the strand, the end faces of the thrust links in contact with the disks are carbonitrided and case hardened. Chiba et al. further disclose a CVT with two shafts 1,11 having at least one conical disk 4A,12A per shaft axially movable relative to the shaft wherein contact surfaces of the discs are provided with a carbonitrided layer which is case hardened. However, Chiba fails to disclose the particulars of the nitrided outer layer. Takemura et al. teach the use of a nitrided outer layer in a CVT torque transmission element with a nitrogen content of 0.02%, which is at least about 0.01%, and which is further case hardened. It would have been obvious to one of ordinary skill in the art at

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the time the invention was made to provide the nitrided layer of Chiba with the N levels of Takemura in order to inhibit frictional wear, as disclosed in column 3, lines 20-25. Chiba in view of Takemura fail to disclose the exact thickness of the nitrided layer. Hattori discloses that it is known in the art to provide a CVT belt with a nitrided outer layer having a thickness of about 50 microns. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the nitrided outer layer of Chiba with the thickness taught by Hattori, in order to reduce frictional wear, as disclosed in column 5, lines 5-25. Chiba discloses a case depth of at least 0.5 mm.

In reference to claims 20 and 21, the prior art shows the carbonitrided layer. The prior art discloses the basic product as cited in the claims. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. See MPEP § 2113.

Response to Arguments

7. Applicant's arguments filed April 7, 2003 have been fully considered but they are not persuasive. Applicant argues that Ueda lacks rocker members, but members 20 of Ueda are rocker members as broadly claims. Applicant also argues that Chiba fails to disclose a nitrided thrust link belt. However, Chiba does teach, as pointed out in the rejection, that it is known in the art to provide v-shaped elements of such a belt with a nitrided outer layer.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin Stefanon whose telephone number is 703-305-1945. The examiner can normally be reached on Monday - Friday 6 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Bucci can be reached on 703-308-3668. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.


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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

js
June 30, 2003


DAVID A. BUCCI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600